Docket No.: 279222001000
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:
Takaaki KUBODERA et al.

Application No.: 10/602,826 Confirmation No.: 1829

Filed: June 25, 2003 Art Unit: 3749

For: METHOD AND DEVICE FOR DYEING LENSES Examiner: J. Lu

**APPEAL BRIEF**

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on September 12, 2007, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

| | |
|---|---|
| I. | Real Party In Interest |
| II | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Claimed Subject Matter |
| VI. | Grounds of Rejection to be Reviewed on Appeal |

VII. Argument
VIII. Claims
IX. Evidence
X. Related Proceedings
Appendix A Claims

## I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

HOYA CORPORATION

## II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

## III. STATUS OF CLAIMS

### A. Total Number of Claims in Application

There are 6 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 1-10, 12, 18-19

2. Claims withdrawn from consideration but not canceled: none

3. Claims pending: 11 and 13-17

4. Claims allowed: none

5. Claims rejected: 11 and 13-17

C. Claims On Appeal

The claims on appeal are claims 11 and 13-17

## IV. STATUS OF AMENDMENTS

Applicant did not file an Amendment After Final Rejection.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 11 recites a dyeing device (element 1, Fig. 1, para. [0029]) for dyeing a plastic lens, comprising a heating furnace (element 10, Fig. 1, para. [0029]) comprising a frame section (element 11, Fig. 1, para. [0034]) forming a space within the heating furnace and a cooling mechanism (element 40, Fig. 1, para. [0029]) in a position corresponding to a portion of the lens within the space formed by the frame section; wherein the cooling mechanism is separated from the frame section; a heating section (element 12, Fig. 1, para. [0029]) provided within the frame section; an openable insertion port (element 14, Fig. 1, para. [0029]) for allowing insertion of the lens provided on or near a bottom surface of the frame section; a lens-holding mechanism (element 20, Fig. 1, para. [0029]) for holding the lens; and a lens-moving mechanism (element 30, Fig. 1, para. [0029]) for vertically moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace.

Independent claim 16 recites a dyeing device (element 1, Fig. 1, para. [0029]) for dyeing a plastic lens, comprising a heating furnace (element 10, Fig. 1, para. [0029]) comprising a frame section (element 11, Fig. 1, para. [0034]) forming a space within the heating furnace; a heating section (element 12, Fig. 1, para. [0029]) provided within the frame section; an openable insertion port (element 14, Fig. 1, para. [0029]) for allowing insertion of the lens provided on or near a bottom surface of the frame section; a lens-holding mechanism (element 20, Fig. 1, para. [0029]) for holding the lens; and a lens-moving mechanism (element 30, Fig. 1, para. [0029]) for moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace, wherein the lens-moving mechanism is configured to move the lens in a vertical direction while the lens is in the heating section (see para. [0038]), and wherein the heating furnace further comprises a cooling mechanism (element 40, Fig. 1, para. [0029]) in a position corresponding to a portion of the lens within the frame section not requiring coloration (paras. [0032] and [0033]).

Independent claim 17 recites a dyeing device for dyeing a plastic lens, comprising a heating furnace (element 10, Fig. 1, para. [0029]) comprising a frame section (element 11, Fig. 1, para. [0034]) forming a space within the heating furnace; a heating section (element 12, Fig. 1, para. [0029]) provided within the frame section; an openable insertion port (element 14, Fig. 1, para. [0029]) for allowing insertion of the lens provided on or near a bottom surface of the frame section; a lens-holding mechanism (element 20, Fig. 1, para. [0029]) for holding the lens; a lens-moving mechanism (element 30, Fig. 1, para. [0029]) for moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace; and a device for setting a temperature distribution state within the heating furnace such that the temperature increases from the vicinity of the insertion port toward the inside of the frame section (see paras. [0029] and [0030]), wherein the heating furnace further comprises a cooling mechanism (element 40, Fig. 1, para. [0029]) in a position corresponding to a portion of the lens within the frame section not requiring coloration.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 11, 13-17 stand rejected under 35 USC 103(a) as being unpatentable over Krohn, U.S. Patent No. 4,036,624 in view of Kamata, U.S. Patent No. 6,520,999.

VII. ARGUMENT

Claims 11, 13-17 stand rejected under 35 USC 103(a) as being unpatentable over Krohn, U.S. Patent No. 4,036,624 in view of Kamata, U.S. Patent No. 6,520,999. The Examiner maintains that Krohn teaches a dyeing device for dyeing a plastic lens comprising all of the features of the independent claims except for the feature of a vertical lens moving mechanism. The Examiner maintains that this feature is taught by Kamata and that it would have been obvious to substitute the lens-moving mechanism 11, 12 of Kamata for the lens-moving mechanism 31 of Krohn "in order to move the lens in a vertical direction." Appellants respectfully disagree with the Examiner for the following reasons.

First, Krohn does not teach dying a plastic lens. Krohn is actually directed to ophthalmic lens pressings made from glass, such as unnucleated photochromic glass (col. 5, lines 3-6).

Next, Krohn fails to teach or suggest a cooling mechanism in a position corresponding to a portion of the lens within the space formed by the frame section; wherein the cooling mechanism is separated from the frame section. The Examiner asserts that elements 20-23 of Krohn correspond to the claimed cooling mechanism, however appellants respectfully disagree.

Elements 20-23 of Krohn do not function as a cooling mechanism. Although the Examiner has previously argued that Krohn teaches that the bricks are spaced different distances from shell 12 and that the distance progressively increases in size to allow variable flows of air and thus greater cooling through convection and radiation (Office Action mailed October 18, 2006), appellants maintain that these bricks still do not function as a cooling mechanism. Rather, Krohn clearly teaches that the bricks are refractory insulating bricks (col. 10, line 56). As is well known in the art, a refractory brick is a block of refractory ceramic material used in lining furnaces and kilns. Refractory bricks are built primarily to withstand temperature, but do not serve to cool anything.

The refractory bricks actually function to keep the furnace warm stepwise because the closer a part of the furnace is to the first brick 20, the higher the temperature of that part of the furnace. Thus, a refractory brick cannot be considered to correspond to a cooling mechanism.

In response, the Examiner asserts that the claims fail to structurally define what a cooling mechanism is and thus anything that performs some cooling function would constitute a cooling mechanism (see Office Action dated June 15, 2007, pg. 3). However, appellants clearly submitted that the bricks doe not actually perform a cooling function, thus the Examiner's arguments are not correct and Krohn fails to teach or suggest this feature.

Further, even if the bricks 20-23 perform some cooling function, the bricks 20-23 are not separate from the frame section, as claimed. Appellants previously submitted that if the Examiner considers that element 10 of Krohn corresponds to the claimed frame section and elements 20-23 correspond to the claimed cooling mechanism, he cannot also assert that the bricks are "separate" from the frame section 10, as is clearly evident by Fig. 1 which shows brick 20 resting on frame section 10 (see response filed March 16, 2007). In response to this argument, the Examiner asserts that there is no structure in the claims that structurally defines such a separation, and thus since the bricks are made from separate pieces, they would constitute "separated" from the frame (see Office Action dated June 15, 2007, pg. 3). Appellants respectfully disagree with this assertion.

Claim 11, for example, recites that the cooling mechanism is separated from the frame section. There is little room for ambiguity as to what is meant by this claim recitation. The cooling mechanism and the frame section are two separate pieces. The fact that the bricks are each separate from each other, i.e., brick 20 is separate from brick 21, and so on, is irrelevant because the Examiner has previously recited that the frame section comprises the bricks, and thus it would be impossible for the cooling mechanism, i.e., the bricks, to be separate from the frame section as is clearly necessitated by the claim language. Merely because the so-called cooling mechanism is formed of several separate pieces is totally irrelevant.

Finally, appellants have asserted that the bricks 20-23 are outside the furnace, whereas the claimed cooling mechanism is located within the furnace. The Examiner has repeatedly asserted that he considers that the entire system is located in a room which may be called a heating furnace. However, besides being far reaching, this is contrary to the actual teachings of Krohn. Krohn teaches that element 10 is a refractory insulating support structure for a laboratory furnace (col. 10, lines 45-46). If the entire room was the furnace, that would mean that element 10 supports the room. That is obviously not the case. To argue that the entire room is the "furnace" is without support within Krohn. Further, claim 11 recites that the lens-moving mechanism moves the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace. If one were to consider the entire room the heating furnace, Krohn could not provide a lens-moving mechanism to move the lens from the insertion portion to an interior portion of the heating furnace because it would already be in the heating furnace (i.e., the room).

In view of the foregoing, appellants submit that Krohn fails to teach or suggest the claimed cooling mechanism.

Finally, appellants submit that one of ordinary skill in the art would not have been motivated to substitute the lens-moving mechanism 11, 12 of Kamata for the lens-moving mechanism 31 of Krohn "in order to move the lens in a vertical direction." Appellant submit this is impermissible hindsight on behalf of the Examiner.

Merely because Kamata *may* teach that the lens moves in a vertical direction is not sufficient motivation to one of ordinary skill in the art to modify Krohn to move the lens in a vertical direction. The Examiner has failed to cite specific evidence of a motivation to modify Krohn in such a manner. Merely because such a modification would have this result, i.e., that the lens would move in the vertical direction, provides no reason to do so. Further, Krohn would need to totally redesign its device to accomplish this modification. The Examiner has failed to assert why it would have been desirous to modify Krohn to provide a lens moving mechanism which moves the lens in the vertical direction, and merely stating that the modification would result in the lens

moving in a vertical direction is circular reasoning and insufficient to establish a prima facie case of obviousness

Furthermore, Kamata discloses a lens moving system which has an opened insertion port for inserting the lens on the upper side of the vacuum vapor-deposition transfer device. Kamata does not teach an openable insertion port for inserting the lens provided on the bottom surface of the frame section.

Still further, Kamata discloses a method for dyeing a plastic lens by using a printer electrically controlled and using a vacuum vapor-deposition transfer device. This method of dyeing is completely different from that of the claimed invention. The Examiner asserts that it would have been obvious to substitute the lens-moving mechanism 11, 12 of Kamata for the lens-moving mechanism of Krohn in order to move the lens in a vertical direction. However, the lens-moving mechanism disclosed in Kamata merely exists for approximating lens 14 to the colored layers 2. The half dyeing in Kamata is then achieved by the density gradient controlled by a PC, not with the lens-moving mechanism. In contrast, the lens-moving mechanism of the claimed invention is used for the half-dyeing process. Thus one of ordinary skill in the art would not have been motivated to look to Kamata to modify Krohn.

The remaining claims are allowable for the reasons set forth above and appellants respectfully request that this rejection be overturned.

## VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A. As indicated above, the claims in Appendix A do include the amendments filed by Applicant on August 1, 2006.

## IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are not provided, hence no Appendix is included.

Dated: November 13, 2007

Respectfully submitted,

By 

Deborah S. Gladstein
Registration No.: 43,636
MORRISON & FOERSTER LLP
1650 Tysons Blvd, Suite 400
McLean, Virginia 22102
(703) 760-7753

## APPENDIX A

**Claims Involved in the Appeal of Application Serial No.** 10/602,826

11. A dyeing device for dyeing a plastic lens, comprising:

a heating furnace comprising a frame section forming a space within the heating furnace and a cooling mechanism in a position corresponding to a portion of the lens within the space formed by the frame section; wherein the cooling mechanism is separated from the frame section;

a heating section provided within the frame section;

an openable insertion port for allowing insertion of the lens provided on or near a bottom surface of the frame section;

a lens-holding mechanism for holding the lens; and

a lens-moving mechanism for vertically moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace.

13. The dyeing device for dyeing a plastic lens of claim 11, wherein the lens-moving mechanism further comprises a device for controlling the insertion position of the lens into the interior portion of the furnace.

14. The dyeing device for dyeing a plastic lens of claim 11, further comprising a device for controlling a temperature distribution within the heating section so as to produce a half-dyed lens.

15. The dyeing device for dyeing a plastic lens of claim 11, further comprising a device for controlling the heating of the lens so as to produce a variation in coloration in the lens.

16. A dyeing device for dyeing a plastic lens, comprising:

a heating furnace comprising a frame section forming a space within the heating furnace;

a heating section provided within the frame section;

an openable insertion port for allowing insertion of the lens provided on or near a bottom surface of the frame section;

a lens-holding mechanism for holding the lens; and

a lens-moving mechanism for moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace,

wherein the lens-moving mechanism is configured to move the lens in a vertical direction while the lens is in the heating section, and

wherein the heating furnace further comprises a cooling mechanism in a position corresponding to a portion of the lens within the frame section not requiring coloration.

17. A dyeing device for dyeing a plastic lens, comprising:

a heating furnace comprising a frame section forming a space within the heating furnace;

a heating section provided within the frame section;

an openable insertion port for allowing insertion of the lens provided on or near a bottom surface of the frame section;

a lens-holding mechanism for holding the lens;

a lens-moving mechanism for moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace; and

a device for setting a temperature distribution state within the heating furnace such that the temperature increases from the vicinity of the insertion port toward the inside of the frame section,

wherein the heating furnace further comprises a cooling mechanism in a position corresponding to a portion of the lens within the frame section not requiring coloration.